DWR Climate News Digest

June 18th - August 31st, 2014

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The information provided herein is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management. The links provided herein are intended to provide educational and thought-provoking material for water managers and water users.

To subscribe to the DWR Climate News listserv and receive notifications when new editions are posted, send an email to: climatechange@water.ca.gov.

TOPICS [Find older items in the Climate News Archive]

Reports

<u>Safeguarding California: Reducing Climate Risk</u> [California Natural Resources Agency – July 2014] ("This plan, which updates the 2009 California Climate Adaptation Strategy, highlights climate risks in nine sectors in California, discusses progress to date, and makes realistic sector-specific recommendations")

The Cost of Delaying Action to Stem Climate Change [White House – July 2014] ("Just as businesses and individuals guard against severe financial risks by purchasing various forms of insurance, policymakers can take actions now that reduce the chances of triggering the most severe climate events"; "An analysis of research on the cost of delay for hitting a specified climate target suggests that net mitigation costs increase, on average, by approximately 40 percent for each decade of delay.")

Governing California Through Climate Change [Little Hoover Commission – July 2014]

Risky Business - The Economics of Risks of Climate Change in the United States (pdf)

[Risky Business Project – June 2014] ("The signature effects of human-induced climate change – rising seas, increased damage from storm surge, more frequent bouts of extreme heat – all have specific, measureable impacts on our nation's current assets and ongoing economic activity...this report uses a standard risk-assessment approach to determining the range of potential consequences for each region of the U.S.")

- <u>Assessing Health Vulnerability to Climate Change: A Guide for Health Departments</u> [Center for Disease Control July 2014]
- <u>Considering Multiple Futures: Scenario Planning to Address Uncertainty in Natural Resource</u>

 <u>Conservation</u> [US Fish and Wildlife Service and Wildlife Conservation Society July 2014]
- <u>Climate-Smart Development: Adding up the Benefits of Actions that Help Build Prosperity, End</u>

 <u>Poverty and Combat Climate Change</u> [June 2014]
- <u>Climate-Smart Conservation Putting Adaptation Principles into Practice</u> [National Wildlife Federation May 2014]

Grants and Other Funding Opportunities

The energy department just announced \$4 billion for projects that fight global warming [Think Progress – July 3, 2014]

Published Literature

Climate Exposure of US National Parks in a New Era Of Change [PLOS – July 2, 2014]

Sea-level Rise and other Ocean Impacts

Cause of global warming hiatus found deep in the Atlantic Ocean

[Science Daily – August 21, 2014]

California is 'woefully unprepared' for sea level rise, says a new report

[Think Progress – August 21, 2014]

<u>Tailpipes, smokestacks outproduce volcanoes</u> [SF Gate – August 15, 2014]

Ocean's most oxygen-deprived zones to shrink under climate change

[University of Washington – August 7, 2014]

<u>Coastal winds intensifying with climate change, study says</u> [LA Times – July 3, 2014]

- <u>Climate change in the North Sea: Long-term studies reveal drastic changes in the marine</u> <u>fauna</u> [Science Daily – June 30, 2014]
- On N.C.'s Outer Banks, scary climate-change predictions prompt a change of forecast [Washington Post June 24, 2014]

Ocean acidification's far-reaching effects on ecology, economy [KQED – June 18, 2014]

Agriculture/Food Production

Driven by climate change, cotton buyers look for alternative [August 27, 2014]

<u>United States and Five African Countries Announce Intention to Join Global Alliance for</u>
<u>Climate-Smart Agriculture</u> [U.S. Department of State – August 14, 2014]

<u>Climate change and drought in ancient times</u> [Science Daily – August 11, 2014]

Study: Climate change and air pollution will combine to curb food supplies
[MIT news – July 27, 2014]

Extreme Weather Events

Climate change ups odds of a southwest megadrought [Climate Central – August 29, 2014]

Why climate change won't intensify extreme snowstorms [Yahoo – August 27, 2014]

87 cities, 4 scenarios and 1 really hot future [Climate Central – August 7, 2014]

Global warming: June's heat was record-breaking, for the planet, California and San Francisco [SF Gate – July 21, 2014]

<u>Drier than the Dust Bowl: Waiting for relief in rural America</u> [Washington Post – July 21, 2014]

<u>California summer will be state's hottest and driest on record, national climate scientists say</u>

[International Business Times – July 2, 2014]

Global warming makes drought come on earlier, faster, and harder

[The Guardian – June 30, 2014]

Hacking the climate: The search for solutions to the world's greatest challenge

[Grist – June 30, 2014]

Big waves in jet stream mean extreme weather [Scientific American – June 23, 2014]

Human Health Impacts

Climate change: A chronic health problem for the 21st century

[Thomas Reuters Foundation – August 29, 2014]

Cutting emissions pays for itself, study concludes [Science Daily – August 24, 2014]

Two reports warn Los Angeles County residents of how climate change can affect health

[Los Angeles Daily News – August 18, 2014]

Researchers tackle link between climate change and public health

[The Guardian – July 25, 2014]

<u>Assessing Health Vulnerability to Climate Change: A Guide for Health Departments</u> [Center for Disease Control – July 2014]

Tribal Impacts & Traditional Ecological Knowledge

<u>Video documents tribal climate change variability challenges and solutions</u>

[Native American Times – August 29, 2014]

Feds will spend \$450K to help Native Americans adapt to 'climate change'

[CNS News – August 5, 2014]

Fire ecology manipulation by California native cultures [Science Daily – July 26, 2014]

("Working closely with tribes, the government can meet its trust responsibility and have accountability to tribes, and also fulfill the public trust of protection of life, property, and resources")

Wildlife and Ecosystem Impacts

Research links clam behavior to climate change [CBC news – August 28, 2014]

<u>Climate change will threaten fish by drying out southwest U.S. streams, study predicts</u>
[Science Daily – August 18, 2014]

<u>California wildfires kill more than trees, and that may help us prevent them in the future</u>
[Ecosystem Marketplace – August 5, 2014]

<u>Kudzu can release soil carbon, accelerate global warming</u> [Science Daily – July 1, 2014]

<u>Protecting rainforests could sequester equivalent of a third of global emissions annually</u>
[Mongabay – June 13, 2014]

Greenhouse Gas Mitigation

Existing power plants will spew 300 billion more tons of carbon dioxide during use

[UC Irvine news – August 26, 2014]

Keystone XL would increase greenhouse gas pollution [Scientific American – August 11, 2014]

Roadside land offers huge carbon storage potential [Climate Central – July 27, 2014]

Corralling carbon before it belches from the stack [New York Times – July 21, 2014]

Drought hinders state's emissions goals [SF Gate – July 20, 2014]

Can the fern that cooled the planet do it again? [Scientific American – July 15, 2014]

<u>California rice farmers could get pollution credit</u> [Sacramento Bee – July 5, 2014]

Marin 'carbon farming' project offers hope on global warming [Marin News – June 29, 2014]

Climate Adaptation

Study gives hope of adaptation to climate change [New York Times – July 24, 2014]

<u>Learning from community-based natural resource management</u> [Climate Prep – July 23, 2014]

Military bases face hurdles in climate change adaptation [Scientific American – July 15, 2014]

Hawaii, Rhode Island, Vermont take serious climate adaptation action

[Clean Technica – July 3, 2014]

International Planning

Mega plan to tackle climate change threats holistically [BD News24 – August 27, 2014]

("Bangladesh is preparing a mega-plan to deal with the climate change threats 'holistically'")

Kyrgyzstan revives pre-Soviet traditions for climate adaptation

[Responding to Climate Change – July 31, 2014]

<u>China's hurdle to fast action on climate change</u> [New York Times – July 1, 2014]

Climate Change Modeling

UC Berkeley researchers take part in national effort to predict climate change

[Daily Californian – August 29, 2014]

Legislative Updates

U.S. Supreme Court refuses challenge to California climate rule [Reuters – July 1, 2014]

Supreme Court: EPA can regulate greenhouse gas emissions, with some limits

[Washington Post – June 23, 2014]

Communicating Climate Change

Meet the scientists who sat (FLA governor) Rick Scott down and explained climate change to him [Salan – August 21, 2014]

How to talk about climate change so people will listen [Atlantic – August 13, 2014]

<u>Shattering myths to help the climate</u> [New York Times – August 2, 2014]

BLOGS/Commentary

Washington Post Editorial Board on "<u>A climate for change: The EPA's limits on emissions are</u>
important but not enough" [Washington Post – August 26, 2014]

Matthew Hutson on "Why our brains are wired to ignore climate change"

[Washington Post – August 21, 2014]

Eric Holthaus on "Why I'm a climate change alarmist" [Slate – August 20, 2014]

Daniel Swain on "An overview of California's ongoing and extraordinary drought: A tale of exceptional dryness and record warmth" [Weatherwest.com – July 20, 2014]

Christopher Solomon on "*Rethinking the wild*" [New York Times – July 5, 2014] (do we need to accept our role as reluctant gardeners?)

Henry Paulson, Jr. on "The coming climate crash" [New York Times – June 21, 2014] ("I was the secretary of the Treasury when the credit bubble burst, so I think it's fair to say that I know a little bit about risk, assessing outcomes and problem-solving. Looking back at the dark days of the financial crisis in 2008, it is easy to see the similarities between the financial crisis and the climate challenge we now face")

<u>Additional Items of Interest</u>

Climate change to affect Hawaii's tourism industry, says study

[Insurance Journal – August 29, 2014]

Research highlight: In pointing out flaws in climate change data, two studies show how science works [Scripps Institution of Oceanography – August 28, 2014]

<u>Leaked U.N. report: Climate change impacts already 'inevitable', may be soon 'irreversible'</u>
[Newsweek – August 26, 2014]

<u>Photographer captures scientists' frightened responses to climate change discussions</u> [Huffington Post – August 25, 2014] Hundreds of methane plumes erupting along East Coast [MSN – August 24, 2014]

32 powerful photos of the world feeling the impact of climate change

[Weather.com – August, 22, 2014]

Scientists invent a way to generate electricity from your home's windows [August 20, 2014]

Record decline of ice sheets: Scientist map elevation changes of Greenlandic and Antarctic glaciers [Science Daily – August 20, 2014]

Methane leaking from Sacramento gas pipelines adds to greenhouse effect

[Sacramento Bee – August 17, 2014]

Human contribution to glacier mass loss increasing [Science Daily – August 14, 2014]

5 key threats to California from climate change [National Geographic – August 12, 2014]

<u>Issue brief: Summarizing recent governmental climate change publications</u>

[EESI – August 4, 2014]

These maps who how big data can fight climate change [Climate Progress – July 30, 2014]

Ancient history shows us just how bad and volatile climate change could get

[Washington Post – July 25, 2014] ("...we have been lulled into a false sense of security by the...10,000-odd years of peaceful, stable climate during the Holocene itself. This has allowed us to tame crops and livestock, and come together to form communities, villages and, ultimately, cities.")

Commission calls for California to lead in climate change adaptation

[Twain Harte – July 24, 2014] (According to a Little Hoover Commission report "California must prepare for the inevitable...will cost far less than rebuilding infrastructure and managing emergencies")

Synchronization of North Atlantic, North Pacific preceded abrupt warming, end of ice age [Oregon State University – July 24, 2014]

Who is most to blame for climate change? [NPR – July 24, 2014]

Change in Antarctic sea ice trend not so extreme, study finds [Think Progress – July 23, 2014]

NHL (National Hockey League) outlines plan to fight climate change [The Hill – July 21, 2014]

Global warming: June's heat was record-breaking, for the planet, California and San Francisco

[SF Gate – July 21, 2014]

US mayors to use nature to fight climate change [ABC News – June 22, 2014]

White House announces climate change initiatives [New York Times – July 16, 2014]

[interactive website] 1001 Blistering Future Summers [Climate Central – July 15, 2014] (use this interactive tool to see what 1001 different US cities' summers will be like by 2100)

Coastal winds intensifying with climate change, study says [LA Times – July 3, 2014]

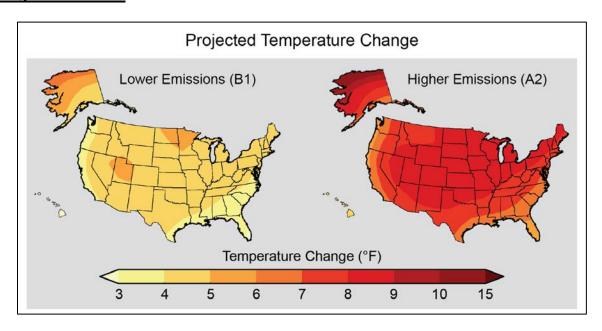
NASA launches carbon mission to watch Earth breathe [Science Daily – July 2, 2014]

Putting a price tag on the 2 degree Celsius climate target [Science Daily – July 2, 2014]

At the national parks: Melting glaciers, dying trees [USA Today – June 30, 2014]

New study adds up the benefits of climate-smart development in lives, jobs and GDP [World Bank – June 23, 2014]

Images to Ponder



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Current and past editions of the DWR Climate News Digest can be viewed and downloaded at: http://www.water.ca.gov/climatechange/news.cfm. Please email questions, comments, or listserv subscription requests to: climatechange@water.ca.gov.